Abstract of the Disclosure

A high-power resistor including a plurality of resistor elements, made of sheets of an electrically conductive resistance material, with a first and a second terminal. The resistor elements are mutually separated by disc-shaped insulating first shims. The first and second terminals are connected to adjacently located resistor elements so that the respective first terminals are connected to a first terminal and that the respective second terminals are connected to a second terminal. Two adjacent resistor elements form a current path, whereby, viewed in a direction perpendicular to the plane of the sheets, said first and second terminals, respectively, are so mutually positioned that, for a current supplied thereto, the current path in one resistor element substantially overlaps the current path in an adjacent resistor element and hence carries current in mutually opposite directions in the two adjacent resistor elements.